



## **Maintenance Checksheets**

**DC Controls. Unit 6, Tallaght Business Centre, Tallaght Dublin 24. 01-4416651 [www.dcccontrols.ie](http://www.dcccontrols.ie)**

**Project: Holiday Inn Express**

**Date: 08/09/2023**

**Contact: Joe 0851148122**

**Engineers: Dean Hayden & Jordan Finlay**

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DC Controls. Unit 6, Tallaght Business Centre, Tallaght Dublin 24. 01-4416651 [www.dccontrols.ie](http://www.dccontrols.ie)

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Engineers: Dean Hayden & Jordan Finlay

Controller Type/Num: Trend 16DI				Status		Make	Model	Notes	Engineer
Point Type	Point Number	Description	Units	Operating Correctly	Faulty	Make	Model		
DI	1	Fire Alarm	On/Off	Yes					DH/JF
DI	2	Gas Detection Alarm	On/Off	Yes					DH/JF
DI	3	AHU-01 Supply Fan Airflow Switch	On/Off	Yes					DH/JF
DI	4	AHU-01 Electric Heater Battery High Limit	On/Off	Yes					DH/JF
DI	5	AHU-02 Supply Fan Airflow Switch	On/Off	Yes					DH/JF
DI	6	AHU-02 Electric Heater High Limit	On/Off	Yes					DH/JF
DI	7	AHU-02 Extract Fan Airflow Switch	On/Off	Yes					DH/JF
DI	8	EF-05 Kitchen Extract CT Switch	On/Off	Yes					DH/JF
DI	9	EF-05 Kitchen Extract CT Switch	On/Off	Yes					DH/JF
DI	10	Mains Water Meter Pulse signal	On/Off	Yes					DH/JF
DI	11	Main Gas Meter Pulse signal	On/Off	Yes					DH/JF
DI	12	DHW Cold Feed to Hotel Water Meter signal	On/Off	Yes					DH/JF
DI	13	CWS Consumption Water Meter signal	On/Off	Yes					DH/JF
DI	14	BCWS to Kitchens Water Meter signal	On/Off	Yes					DH/JF
DI	15	DHW to Kitchens Water Meter signal	On/Off	Yes					DH/JF
DI	16	DHW Return to Kitchens Water Meter signal	On/Off	Yes					DH/JF



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Controller Type/Num: RMA#1			
Point Type	Point Number	Description	Units
DI	1	AHU-01 Supply Fan Enable & Speed signal	On/Off

Status	
Operating Correctly	Faulty
Yes	

Make	Model	Notes	Engineer
Sontay	IO-RMA		DH/JF

Controller Type/Num: RMA#2			
Point Type	Point Number	Description	Units
DI	1	AHU-02 Supply Fan Enable & Speed signal	On/Off

Status	
Operating Correctly	Faulty
Yes	

Make	Model	Notes	Engineer
Sontay	IO-RMA		DH/JF

Controller Type/Num: RMA#3			
Point Type	Point Number	Description	Units
DI	1	AHU-02 Extract Fan Enable & Speed signal	On/Off

Status	
Operating Correctly	Faulty
Yes	

Make	Model	Notes	Engineer
Sontay	IO-RMA		DH/JF

Controller Type/Num: RM2#1			
Point Type	Point Number	Description	Units
DI	1	AHU-01 Electric Heater Batteries 1 Enable	On/Off
DI	2	AHU-01 Electric Heater Batteries 2 Enable	On/Off

Status	
Operating Correctly	Faulty
Yes	
Yes	

Make	Model	Notes	Engineer
Sontay	IO-RM2		DH/JF
Sontay	IO-RM2		DH/JF



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Controller Type/Num: DIM4#1				Status		Make	Model	Notes	Engineer
Point Type	Point Number	Description	Units	Operating Correctly	Faulty				
DI	1	AHU-01 Panel Filter D.P Switch	On/Off	Yes		Kromschroder	CPS 330		DH/JF
DI	2	AHU-01 Bag Filter D.P Switch	On/Off	Yes		Kromschroder	CPS 330		DH/JF
DI	3	AHU-02 Supply Panel Filter D.P Switch	On/Off	Yes		Kromschroder	CPS 330		DH/JF
DI	4	AHU-02 Supply Bag Filter D.P Switch	On/Off	Yes		Kromschroder	CPS 330		DH/JF
Controller Type/Num: DIM4#2				Status		Make	Model	Notes	Engineer
Point Type	Point Number	Description	Units	Operating Correctly	Faulty				
DI	1	Cold Water Booster Fault	On/Off	Yes					DH/JF
DI	2	Water Conditioning No.1 Fault	On/Off	Yes					DH/JF
DI	3	Water Conditioning No.2 Fault	On/Off	Yes					DH/JF
DI	4	Spare	On/Off	-					DH/JF

Notes:	
1.	HWS return pump - cover missing off of pump and live cables are exposed. Type; Grundfoss 32-120 F B.- By others.
2.	ELE Meter 11-20 is reading the same as ELE Meter 21-30 - See quote.
3.	A number of switches were found in hand on the MCC door, Tested and working in auto. Switches were for Gas Fired Heater 1-5- Note.
4.	Mains water meter is reading 0 for Hourly, Monthly and yearly on BMS - See quote.
5.	BMS IP: 10.1.0.11 - Note.
6.	BMS web Login: Username: InTouch Engineer Password: 4232 - Note.



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Description	Units	Operating Correctly	Faulty	Notes	Engineer
AHU 1	On/Off	Yes		On	DH/JF
AHU 1 Bag Filter	On/Off	Yes		Off	DH/JF
AHU 1 Electric Heater H/L	On/Off	Yes		On	DH/JF
AHU 1 Panel Filter	On/Off	Yes		Off	DH/JF
AHU 1 Speed	Hz	Yes		50Hz	DH/JF
AHU 1 Supply Air Setpoint	°C	Yes		18.0°C	DH/JF
AHU 1 Supply Temperature	°C	Yes		21°C	DH/JF
AHU 1 Supply Fan Airflow	On/Off	Yes		OFF	DH/JF
AHU 2	On/Off	Yes		On	DH/JF
AHU 2 Bag Filter	On/Off	Yes		Off	DH/JF
AHU 2 Electric Heater H/L	On/Off	Yes		On	DH/JF
AHU 2 Extract Fan Airflow	On/Off	Yes		On	DH/JF
AHU 2 Extract Fan Speed	Hz	Yes		50Hz	DH/JF
AHU 2 Extract Temperature	°C	Yes		26°C	DH/JF
AHU 2 Heating Output	%	Yes		0%	DH/JF
AHU 2 Panel Filter	On/Off	Yes		Off	DH/JF
AHU 2 Pre-Heater Temperature	°C	Yes		22.5°C	DH/JF
AHU 2 Speed	Hz	Yes		50Hz	DH/JF
AHU 2 Supply Air Setpoint	°C	Yes		18.0°C	DH/JF
AHU 2 Supply Fan Airflow	On/Off	Yes		On	DH/JF
AHU 2 Supply Temperature	°C	Yes		23°C	DH/JF
AHU 2 Thermal Wheel	%	Yes		0.00%	DH/JF
AHU 2 Speed Control	%	Yes		0.00%	DH/JF
AHU 1 Heating Battery 1&2 Enable	%	Yes		0.00%	DH/JF
AHU 1 Heating Battery 3	%	Yes		0.00%	DH/JF
AHU 1 Supply Fan Enable & Speed	%	Yes		100.00%	DH/JF
AHU 1 Supply Fan Airflow Fail	On/Off	NO		ON	DH/JF
AHU 2 Extract Fan Enable & Speed	%	Yes		100.00%	DH/JF
AHU 2 Extract Fan Airflow Fail	On/Off	Yes		Off	DH/JF
AHU 2 Heating Element	%	Yes		0.00%	DH/JF
AHU 2 Supply Fan Enable & Speed	%	Yes		100%	DH/JF
AHU 2 Supply Fan Airflow Fail	On/Off	Yes		Off	DH/JF
BCWS To Kitchen Meter This Year	Ltrs	Yes		20776.6 Ltrs	DH/JF
BCWS To Kitchen Meter This Month	Ltrs	Yes		613.5 Ltrs	DH/JF
BCWS To Kitchen Meter Daily	Ltrs	Yes		38.2 Ltrs	DH/JF
BCWS To Kitchen Meter Hourly	Ltrs	Yes		7.6Ltrs	DH/JF
BCWS To Kitchen Water Meter	On/Off	Yes		Off	DH/JF
Cold Water Booster Fault	On/Off	Yes		On	DH/JF
CWS Consumption Daily	m3	Yes		11.3 m3	DH/JF
CWS Consumption Hourly	m3	Yes		2.16m3	DH/JF
CWS Consumption This Year	m3	Yes		6422.6 m3	DH/JF
CWS Consumption Monthly	m3	Yes		203.03 m3	DH/JF
CWS Consumption Water Meter	On/Off	Yes		Off	DH/JF
CWS Tank 1 High Level	On/Off	Yes		Off	DH/JF
CWS Tank 1 Low Level	On/Off	Yes		Off	DH/JF
CWS Tank 2 High Level	On/Off	Yes		Off	DH/JF

CWS Tank 2 Low Level	On/Off	Yes		Off	DH/JF
DHW Cold To Hotel Meter	On/Off	Yes		Off	DH/JF
DHW Cold To Hotel Daily	Ltrs	Yes		5.1 Ltrs	DH/JF
DHW Cold To Hotel Monthly	Ltrs	Yes		68.88 Ltrs	DH/JF
DHW Cold To Hotel Yearly	Ltrs	Yes		2199.15 Ltrs	DH/JF
DHW Flow Setpoint	°C	Yes		59.0°C	DH/JF
DHW Hot Return	On/Off	Yes		On	DH/JF
DHW Hot Return Fail	On/Off	Yes		Off	DH/JF
DHW Return To Kitchen Meter	On/Off	Yes		Off	DH/JF
DHW Return To Kitchen Meter Hourly	Ltrs	Yes		0 Ltrs	DH/JF
DHW Return To Kitchen Meter Monthly	Ltrs	Yes		100 Ltrs	DH/JF
DHW Return To Kitchen Meter Yearly	Ltrs	Yes		600 Ltrs	DH/JF
DHW Return To Kitchen Meter Daily	Ltrs	Yes		0 Ltrs	DH/JF
DHW To Kitchen Meter Daily	Ltrs	Yes		0 Ltrs	DH/JF
DHW To Kitchen Meter Hourly	Ltrs	Yes		0 Ltrs	DH/JF
DHW To Kitchen Meter Yearly	Ltrs	Yes		10100 Ltrs	DH/JF
DHW To Kitchen Meter Monthly	Ltrs	Yes		100 Ltrs	DH/JF
DHW To Kitchen Meter	On/Off	Yes		Off	DH/JF
DIM4 Multiplexer No.1		Yes		8.35	DH/JF
DIM4 Multiplexer No.2		Yes		120.58	DH/JF
EF 01 Enable	On/Off	Yes		On	DH/JF
EF 01 GF Area	On/Off	Yes		On	DH/JF
EF 01 Kitchen Extract A/F	On/Off	Yes		On	DH/JF
EF 02 Enable	On/Off	Yes		On	DH/JF
EF 02 GF Toilet Extract	On/Off	Yes		On	DH/JF
EF 02 Kitchen Extract A/F	On/Off	Yes		On	DH/JF
EF 03 Bedrooms Enable	On/Off	Yes		On	DH/JF
EF 03 Enable Speed	%	Yes		75.00%	DH/JF
EF 03 Supply Fan Airflow Fail	On/Off	Yes		Off	DH/JF
EF 03 Twin Fan Airflow	On/Off	Yes		On	DH/JF
EF 03 Twin Fan Speed Signal	%	Yes		75.00%	DH/JF
EF 04 Bedrooms Enable	On/Off	Yes		On	DH/JF
EF 04 Enable Speed	%	Yes		63.00%	DH/JF
EF 04 Supply Fan Airflow Fail	On/Off	Yes		Off	DH/JF
EF 04 Twin Fan Airflow	On/Off	Yes		On	DH/JF
EF 04 Twin Fan Speed Signal	%	Yes		63.00%	DH/JF
EF 05 Enable	On/Off	Yes		On	DH/JF
EF 05 Supply Fan Airflow Fail	On/Off	Yes		Off	DH/JF
EF 05 Twin Fan Airflow	On/Off	Yes		On	DH/JF
EF 06 Enable	On/Off	Yes		On	DH/JF
EF 06 Linen Room Fail	On/Off	Yes		Off	DH/JF
EF 06 Twin Fan Airflow	On/Off	Yes		On	DH/JF
EF 07 Enable	On/Off	Yes		On	DH/JF
EF 07 Extract Plant Room Fail	On/Off	Yes		Off	DH/JF
EF 07 Twin Fan Airflow	On/Off	Yes		On	DH/JF
EF 01 & 02 Enable Signal	%	Yes		100.00%	DH/JF
ELE Meter 1 kWh	kWh	Yes		1742531 Kwh	DH/JF
ELE Meter 2 kWh	kWh	Yes		366592 kwh	DH/JF
ELE Meter 3 kWh	kWh	Yes		91340.8 kwh	DH/JF
ELE Meter 4 kWh	kWh	Yes		366592 kwh	DH/JF
ELE Meter 5 kWh	kWh	Yes		0 kwh	DH/JF
ELE Meter 6 kWh	kWh	Yes		218112 kwh	DH/JF
ELE Meter 7 kWh	kWh	Yes		108032 kwh	DH/JF
ELE Meter 8 kWh	kWh	Yes		230400 kwh	DH/JF
ELE Meter 9 kWh	kWh	Yes		276070.4 kwh	DH/JF
ELE Meter 10 kWh	kWh	Yes		93184 Kwh	DH/JF

ELE Meter 11 kWh	kWh	Yes		0 kwh	DH/JF
ELE Meter 12 kWh	kWh	Yes		0 kwh	DH/JF
ELE Meter 13 kWh	kWh	Yes		11366.4 kwh	DH/JF
ELE Meter 14 kWh	kWh	Yes		493158.4 kwh	DH/JF
ELE Meter 15 kWh	kWh	Yes		109568 kwh	DH/JF
ELE Meter 16 kWh	kWh	Yes		118784 kwh	DH/JF
ELE Meter 17 kWh	kWh	Yes		104448 kwh	DH/JF
ELE Meter 18 kWh	kWh	Yes		103424 kwh	DH/JF
ELE Meter 19 kWh	kWh	Yes		110080 kwh	DH/JF
ELE Meter 20 kWh	kWh	Yes		128512 kwh	DH/JF
ELE Meter 21 kWh	kWh	Yes		0 kwh	DH/JF
ELE Meter 22 kWh	kWh	Yes		0 kwh	DH/JF
ELE Meter 23 kWh	kWh	Yes		11366.4 kwh	DH/JF
ELE Meter 24 kWh	kWh	Yes		493158.4 kwh	DH/JF
ELE Meter 25 kWh	kWh	Yes		109568 kwh	DH/JF
ELE Meter 26 kWh	kWh	Yes		118784 kwh	DH/JF
ELE Meter 27 kWh	kWh	Yes		104448 kwh	DH/JF
ELE Meter 28 kWh	kWh	Yes		103424 kwh	DH/JF
ELE Meter 29 kWh	kWh	Yes		110080 kwh	DH/JF
ELE Meter 30 kWh	kWh	Yes		128512 kwh	DH/JF
EF 01 Fail	On/Off	Yes		Off	DH/JF
EF 02 Fail	On/Off	Yes		Off	DH/JF
Fire Alarm	On/Off	Yes		On	DH/JF
Gas Detection	On/Off	Yes		On	DH/JF
Gas Fired Heater 1	On/Off	Yes		On	DH/JF
Gas Fired Heater 2	On/Off	Yes		On	DH/JF
Gas Fired Heater 3	On/Off	Yes		On	DH/JF
Gas Fired Heater 4	On/Off	Yes		OFF	DH/JF
Gas Fired Heater 5	On/Off	Yes		OFF	DH/JF
Gas Fire Water 1 Fault	On/Off	Yes		Off	DH/JF
Gas Fire Water 2 Fault	On/Off	Yes		Off	DH/JF
Gas Fire Water 3 Fault	On/Off	Yes		Off	DH/JF
Gas Fire Water 4 Fault	On/Off	Yes		Off	DH/JF
Gas Fire Water 5 Fault	On/Off	Yes		Off	DH/JF
Gas Heater Rotate	On/Off	Yes		Off	DH/JF
Gas Meter Usage Daily	m3	Yes		1.2 m3	DH/JF
Gas Meter Usage Monthly	m3	Yes		4.4 m3	DH/JF
Gas Meter Usage Hourly	m3	Yes		0 m3	DH/JF
Gas Meter Usage Yearly	m3	Yes		365.9 m3	DH/JF
Hot Return Spare				40	DH/JF
Hot Water Return CT	On/Off	Yes		On	DH/JF
HWS Calorifier Return Temperature	°C	Yes		58.9°C	DH/JF
HWS Calorifier Temperature	°C	Yes		62.4°C	DH/JF
Kitchen DHW Daily	Ltrs	Yes		0 Ltrs	DH/JF
Kitchen DHW Hourly	Ltrs	Yes		0 Ltrs	DH/JF
Kitchen DHW Monthly	Ltrs	Yes		0 Ltrs	DH/JF
Kitchen DHW Yearly	Ltrs	Yes		9500 Ltrs	DH/JF
Main Incomer Daily	kWh	Yes		283.25 kW	DH/JF
Main Incomer Energy	kW	Yes		29 kW	DH/JF
Mains Water Meter Daily Usage	m3	Yes		0 m3	DH/JF
Mains Water Meter Hourly Usage	m3/h	Yes		0 m3/h	DH/JF
Mains Water Meter Hourly Usage	Ltrs/h	Yes		0.5 Ltrs/h	DH/JF
Mains Water Meter Monthly Usage	m3	Yes		0 m3	DH/JF
Mains Water Meter Yearly Usage	m3	Yes		0 m3	DH/JF
Mains Water Meter Usage	m3hh	Yes		0 m3	DH/JF
Min.Number Of Water Heaters		Yes		3	DH/JF



Number Of Water Heaters Required		Yes		3	DH/JF
Outside Air Temperature	°C	Yes		36°C	DH/JF
Remote Alarm	On/Off	Yes		On	DH/JF
Supply Fan 01 Air Flow	On/Off	Yes		On	DH/JF
Supply Fan 01 Enable	On/Off	Yes		On	DH/JF
Supply Fan 01 Plantroom Fail (Spare ??)	On/Off	Yes		Off	DH/JF
Sump Fault	On/Off	Yes		Off	DH/JF
Sump Pump Fault	On/Off	Yes		Off	DH/JF
Water Conditioning No.1 Fault	On/Off	Yes		On	DH/JF
Water Conditioning No.2 Fault	On/Off	Yes		On	DH/JF
Water Heater Fault 1	On/Off	Yes		Off	DH/JF
Water Heater Fault 2	On/Off	Yes		Off	DH/JF
Water Heater Fault 3	On/Off	Yes		Off	DH/JF
Water Heater Fault 4	On/Off	Yes		Off	DH/JF
Water Heater Fault 5	On/Off	Yes		Off	DH/JF
Water Heater Lag 1	On/Off	Yes		Off	DH/JF
Water Heater Lag 2	On/Off	Yes		Off	DH/JF
Water Heater Lag 3	On/Off	Yes		Off	DH/JF
Water Heater Lag 4	On/Off	Yes		Off	DH/JF



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Timeclocks	Hours
AHU 1	Mon-Fri 08:00-18:00,Sat & Sun Off
AHU 2	Mon-Fri 08:00-18:00,Sat & Sun Off
Domestic Hot Water	On 24/7
EF 01 Ground Floor Area	Mon-Fri & Sun 06:00-24:00, Sat 05:00-24:00
EF 02 Toilet Extract	Mon-Sun 05:00-22:00
EF 03 Bedrooms	Mon-Sun 08:00-19:00
EF 04 Bedrooms	Mon-Sun 08:00-19:00
EF 05 Kitchen Extract	Mon-Sun 05:00-23:00
EF 06 Basement Area	Mon-Sun 05:00-24:00
Plantroom Fans(SF01 + EF07)	On 24/7



# Maintenance Recommendations & Costs

DC Controls. Unit 6, Tallaght Business Centre, Tallaght Dublin 24. 01-4416651 [www.dcccontrols.ie](http://www.dcccontrols.ie)

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Recommendations

Date: 08/09/2023

Contact: Joe 0851148122

Engineers: Dean Hayden & Jordan Finlay

No.	Description
1	HWS return pump - Cover is missing off of the pump and live cables are exposed. Type; Grundfoss 32-120 F B (noted from previous visit) - <b>By others.</b>
2	Electricity meters - Electricity 11 to 20 is reading the same as the electricity meters 21 to 30. Further investigation required. Trend laptop needed to access program. - <b>See quote.</b>
3	Switches - A number of switches were found in hand on the MCC door. Spoke to Joe and he asked for them back in auto. Tested and working in auto. Switches were for gas fired heater 1-5 - <b>Note.</b>
4	Mains water meters - Meter is reading 0 for hourly, monthly and yearly. Further investigation required - <b>See quote.</b>
5	ELE meters 5, 11, 12, 21, 22 have readings of 0 kwh - <b>See quote.</b>
6	New boilers and calorifiers installed recently. (Not tied into BMS, possibly be tied in future) - <b>Note.</b>
7	Plantroom supply fan needs to be on 24/7 as it has control over the gas supply. If turned off the gas supply knocks off - <b>Note.</b>
8	Calorifiers only have main header flow and return sensors installed - <b>Note</b>
9	OAT is reading 30'C, sensor is facing East. Extract fan close enough to sensor. Recommend moving to North facing wall for accurate readings - <b>See quote.</b>
10	Cold water booster set - Preassure stat not mounted onto pipework - <b>By others.</b>
11	BMS IP - 10.1.0.11 - <b>Note.</b>
12	BMS web login - Username: InTouch Engineer/Password: 4232 - <b>Note.</b>